Geo-Referenced Information Portal (GRIP)

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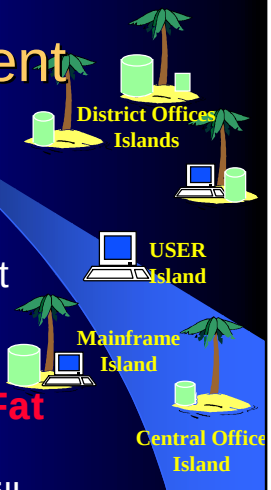
Agenda

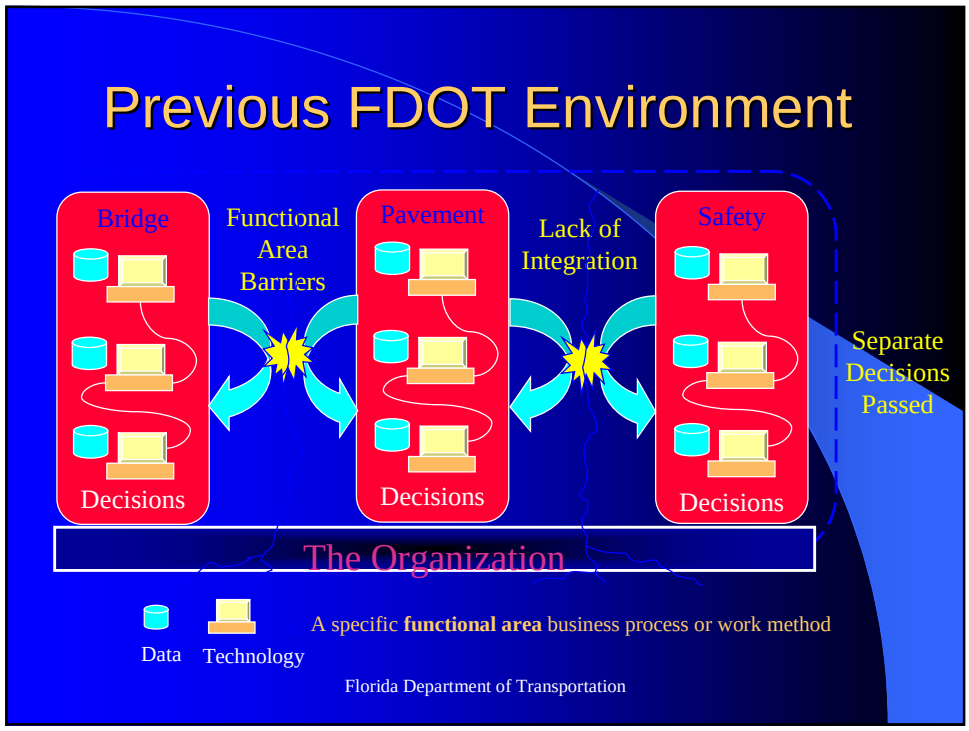
- Previous V.S. New GRIP Environment
- GRIP Business Drivers & Key Concepts
- Goals of the GRIP Solution
- GRIP Solution
- Ancillary Benefits
- FDOT GRIP Demonstration

Previous vs. New GRIP FDOT Environment

Previous FDOT Environment



- Variety of Disparate Databases (mainframe, oracle, foxpro, etc.)
- Redundant copies of data throughout the functional areas and districts
  - Data integrity a serious issue
- Numerous Independent Islands of **"Fat Client"** applications
- Large Number of Users at various skill levels


Previous FDOT Environment
Bridge
Functional Area Barriers
Pavement
Lack of Integration
Safety
Separate Decisions Passed
Decisions
Decisions
Decisions
The Organization
Data
Technology
A specific functional area business process or work method
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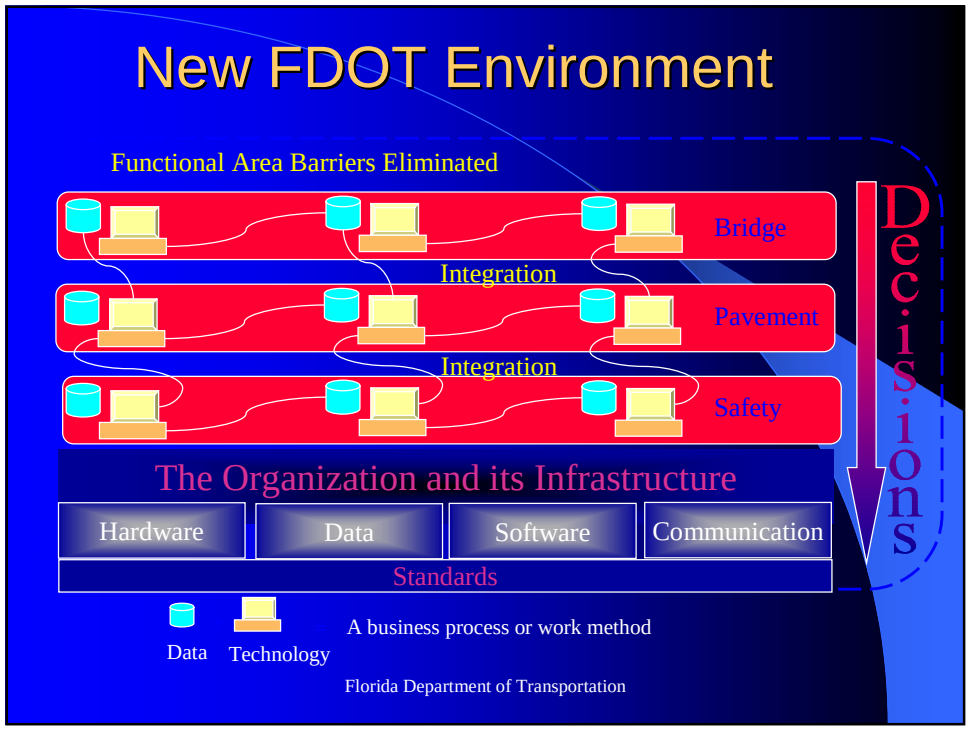
New FDOT Environment
Functional Area Barriers Eliminated
Bridge
Integration
Pavement
Integration
Safety
Decisions
The Organization and its Infrastructure
Hardware
Data
Software
Communication
Standards
Data
Technology
A business process or work method
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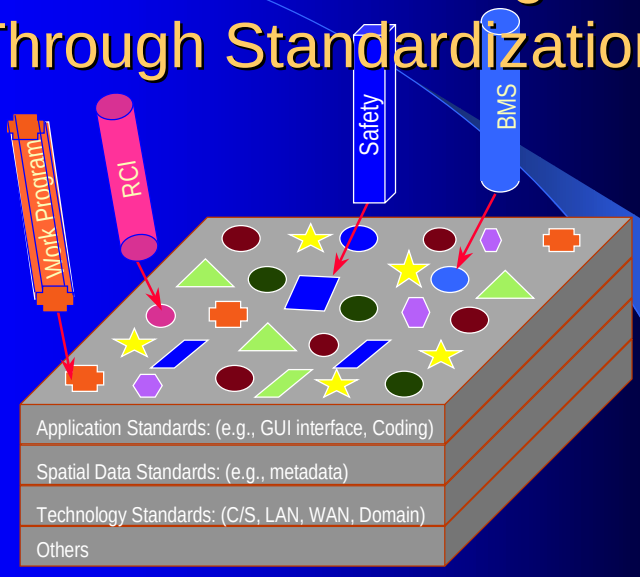
The Pieces come together Through Standardization



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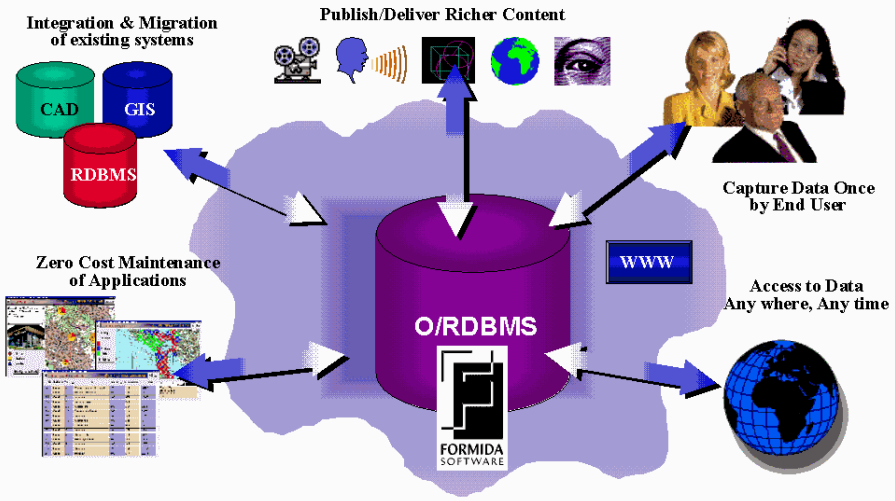
Business Drivers & Key Concepts

Business Drivers



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Key Concepts for the GRIP

- The Enterprise Information System **IS NOT intended** to **ELIMINATE** **or Replace** any existing applications.
- The GRIP **IS** focused toward **INTEGRATION, DISSEMINATION, and LEVERAGING** existing technologies and infrastructure
  - **Not making New Data**

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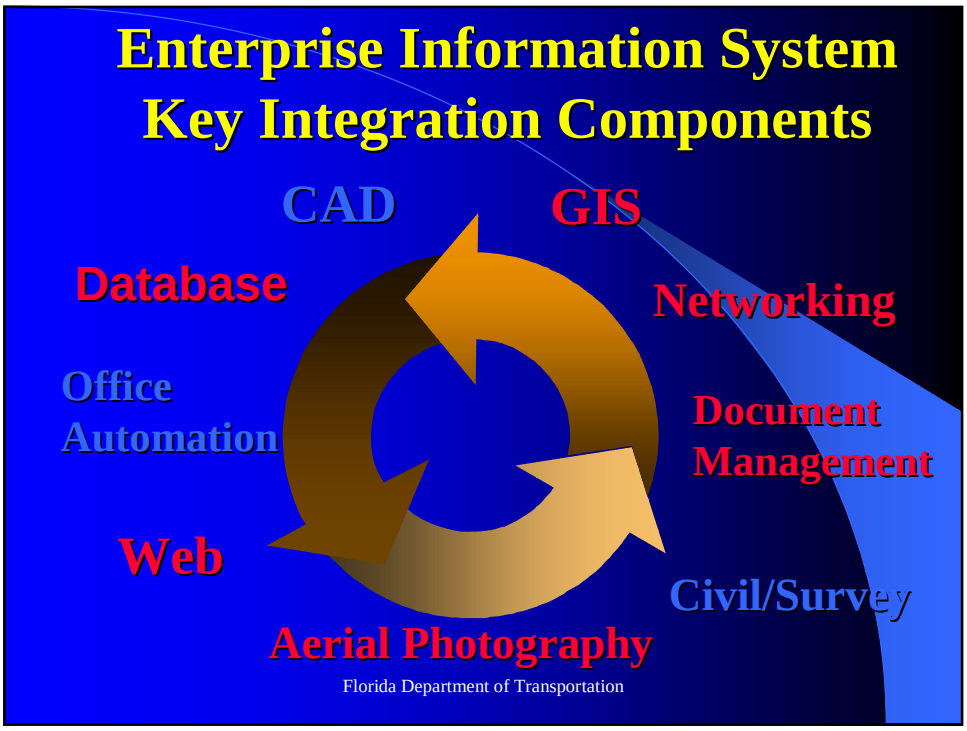
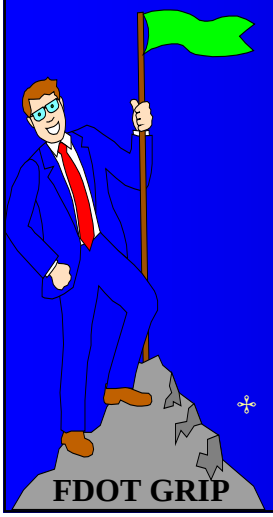
Enterprise Information System
Key Integration Components



Goals of the Enterprise Information System

Goals of the GRIP

- Management of digital assets using a Data Centric Approach
  - ***promote a single, Enterprise data resource;*** (whether logical or physical)
  - encourage data sharing across functional and organizational boundaries;
  - increase confidence in the Department's digital geospatial data by maintaining ***data consistency*** and ***integrity***;
  - Handle temporal issues by providing all users with immediate and easy access to up-to-date information, and;
  - eliminate redundant collection and storage of information.
- Maintain State and Federal perspective



Need to Use Past Investments to Add Value in Meeting Today's Needs

PAST

Enormous investments in organizational databases

CARS
Pavement
ROW
CAD
Bridge

PRESENT

FDOT Enterprise

Intranet

GIS/EDMS

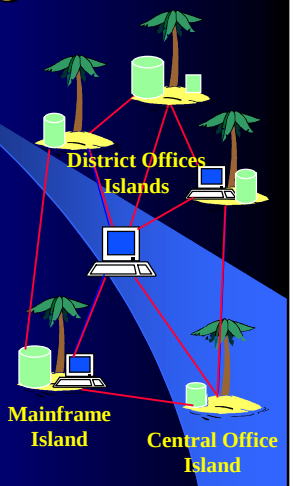
Data Repository

Legacy Databases

GRIP Solution

GRIP Architecture

- Consists of an integrated multi-layered GIS spatial database as well as attribute and image servers residing in each district
  - Access to each district repository is provided by trust agreements within and across district boundaries
- PCs connect to Server via the Intranet (Local Area Network (LAN))
- Each PC has an internet browser (to access the centralized database across the LAN)
- Multiple layers of functionality (i.e., power-users and casual users)



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FDOT Business Requirement	FDOT GRIP
Integration, Dissemination, & Leverage	✔
Centralized access to the Department's business data	✔
Handle numerous data formats and types	✔
Increase timeliness and responsiveness	✔
Perform basic spatial analysis (visualization, queries, & reporting capabilities)	✔
Access to electronic documents (contracts, accidents, etc.)	✔
Consistent data reporting	✔
Provide access to the ALL Department users who have a PC and Intranet access	✔
User friendly interface	✔

Additional GRIP Features

Features	Benefits
Write Once Deploy Many	Decreased deployment $
Very thin Client	minimal resources
Version Control	Lower Maintenance costs
Centralized Management	Easy to configure, Increased Security Controls
Web Browser Based	Lower training costs and smaller learning curve = increased productivity
Scalability	Unlimited # of Users

Ancillary Benefits of GRIP

- Cost saving/avoidance
- Productivity gain
- Better decision support
- Provides a tool for improving quality control
- Reduction of application and data islands

Geo-Referenced Information Portal

1. Build Upon and Enhance Existing Standards
   - GIS
   - Transportation Model
   - Base Map
2. Develop an Enterprise Information System Approach
3. Evolutionary Development Consisting of

Phase 1 - Creation of GRIP Vision, Functional and Data Requirements, Program Structure
- Develop Enterprise Base Map

Phase 2 - Rapid Application Development of GRIP Working Prototype with minimal functionality

Phase 3 - Integration of Priority Data Areas
- Integration of Transportation Model Data in GIS
- Database Design, Application Design & Refinement, and Technical Architecture

Phase 4 - Make GRIP accessible to all users via Intranet and Browser GUI
- Port all data into Oracle data repository

Phase 5 - Develop additional applications for different users sharing same database

Phase 1 thru 4 running from September 1999 to December 2000.
Decision 5 yet to be taken.

Contact Information

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FDOT GRIP DEMO